

REMARKS

Claims 1-44 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 16, 17, 22, 24, 25, 26, 29-31, 37, 39-41, 42 and 43 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sobel (U.S. Pat. No. 6,570,446). This rejection is respectfully traversed.

With respect to claim 16, Sobel fails to show, teach, or suggest an amplifier comprising a start-up circuit in communication with the input circuit, wherein the start-up circuit is configured to generate a start-up signal to enable subsequent operation of the amplifier and the start-up circuit turns off when an output of the amplifier reaches a threshold voltage.

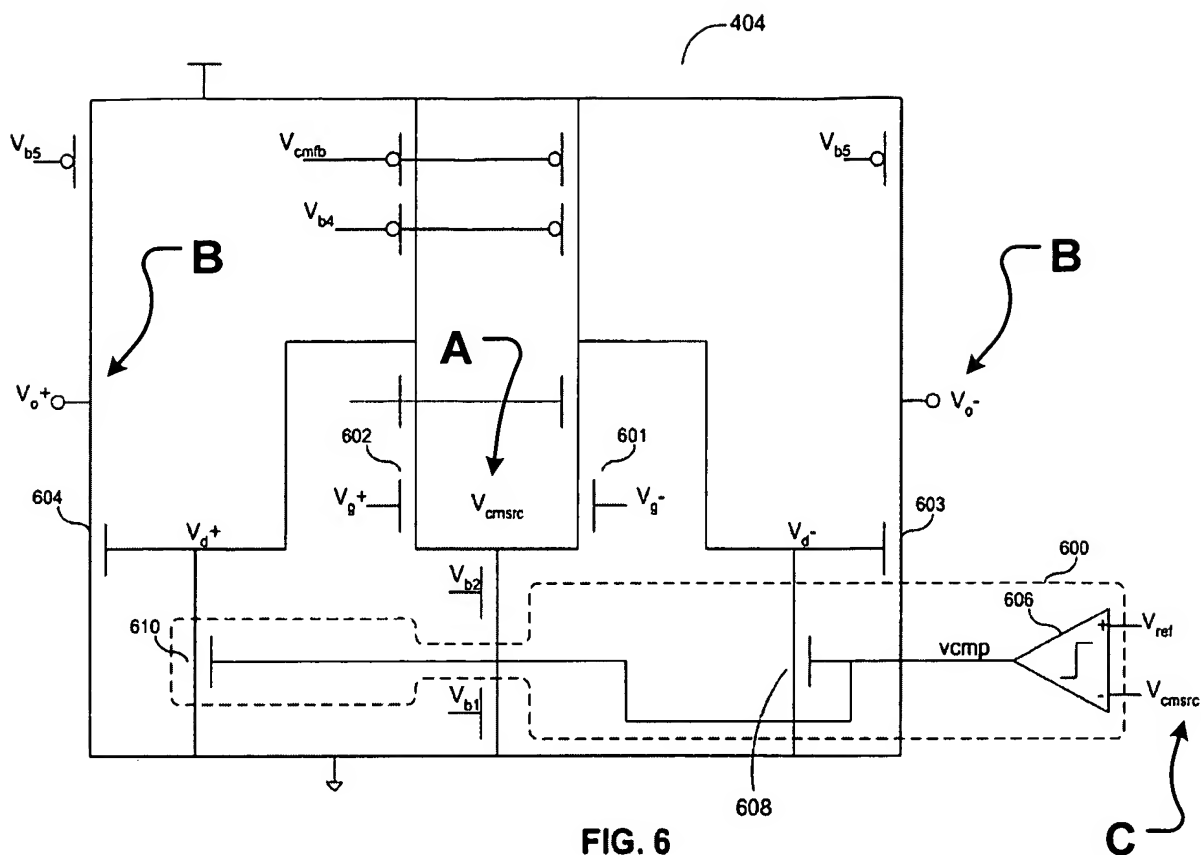
For anticipation to be present under 35 U.S.C §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. Scripps Clinic & Res. Found. V. Genentech, Inc., 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. Constant v. Advanced Micro-Devices, Inc., 7 USPQ.2d 1057 (Fed. Cir. 1988). Here, Sobel fails to disclose the limitation that the start-up circuit turns off when an output of the amplifier reaches a threshold voltage.

As shown in an exemplary embodiment in FIG. 1A and described in Paragraph [0046] of the present invention, the start-up circuit 103 starts conducting current at power up, creating an output signal at output 109 of the amplifier. When the output 109 reaches a threshold voltage, the start-up circuit turns off. For example, a comparator 139 receives a feedback signal 141 from the output 109 and compares the feedback signal to a reference voltage (i.e. a threshold voltage) of 1.5V. In other words, the start-up circuit 103 responds to the output of the amplifier.

The Examiner alleges that FIG. 6 of Sobel discloses a startup circuit (transistors 608 and 610) that turns off when an output (V_{o+} and V_{o-}) reaches a threshold voltage. The Examiner relies on Column 9, Lines 5-19) to disclose this limitation. Applicant respectfully notes that the cited portion of Sobel states:

When the devices 608 and 610 are activated by the compensatory voltage V_{cmp} , they in-turn pull voltages V_{d+} and V_{d-} , shown in FIG. 6, basically to ground. V_{d+} and V_{d-} being pulled to ground temporarily turn off the devices 603 and 604. This allows V_{o+} and V_{o-} to be pulled back up. Once V_{o+} and V_{o-} are pulled back up, V_{g+} and V_{g-} are pulled up as well through the resistive feedback network 400, shown in FIG. 4. Once V_{g+} and V_{g-} are pulled up, the active devices 601 and 602 begin conducting current, enabling the amplifier 404 to reach a stable start-up state. Furthermore, once V_{g+} and V_{g-} are pulled up, V_{cmsrc} is also pulled up. **When V_{cmsrc} exceeds V_{ref} , the compensatory output voltage V_{cmp} gets pulled to ground so that the devices 608 and 610 are turned off.** Consequently, the amplifier 404 returns to a normal operation mode. (Emphasis added).

As best understood by Applicants, V_{cmsrc} is a voltage at a common source node of transistors 601 and 602 as indicated below at **A** as shown in FIG. 6 of Sobel. In contrast, the output voltage V_{o+} and V_{o-} of the amplifier is indicated at **B**. Applicants respectfully note that the start-up circuit includes a comparator 606 that compares V_{cmsrc} to a reference voltage V_{ref} as indicated at **C**.



In other words, the start-up circuit turns off when V_{cmsrc} reaches a threshold voltage. In contrast, claim 16 requires that the start-up circuit turns off when the output voltage V_{o+}, V_{o-} reaches a threshold voltage. The start-up circuit (i.e. the transistors 608 and 610) respond to V_{cmsrc} instead of the output voltage (V_{o+} and V_{o-}) of the amplifier.

Applicants respectfully submit that claim 16, as well as its dependent claims, should be allowable for at least the above reasons. Claim 29, as well as its dependent claims, should be allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

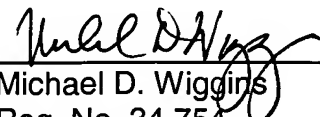
The Examiner states that claims 1-15 are allowed and that claims 19, 20, 21, 23, and 32-35 would be allowable if rewritten in independent form. Applicants thank the Examiner for the allowable subject matter. Accordingly, Applicants have amended claims 19, 20, 21, 23, and 32-35 to include the limitations of the base claim and any intervening claims. Therefore, claims 19, 20, 21, 23, and 32-35 should now be in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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